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CCR5 | HYLCO

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09TQ12 | MACCHA

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10-MAY-2005 (Rel. 47, Last an Creation update)
C-C chemokine receptor type 2 (CC CKR-2) (CC-CKR-2) (CCR-2) (CCR2)
(Monocyte chemoattractant protein 1 receptor) (MCP-1-R).
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Q6Y3M7_PANTR
Q6Y3M3_MACMU
Q6Y3M3_MACMU
Q6Y3M3_FAPHA
Q6Y3M3_CMACMU
Q6Y3M1_CMACMU
Q6Y3M1_CMACMU
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09TUW2-9PRIM
06YT42-PIG
09TUW2-9PRIM
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Maximum I
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NEDGITIES ESQUENCE LLAKES SCALE MANA (12070KNAM )

NEDLINE-22388257; PubMed=12477332; DOI-10.1073/pnas.24503899;

Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,

Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

Antechenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

Stapleton M., Soares M.B., Bonaldo M.F., Carainci P., Prange C.,

Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

Raba S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

Raba S.S., McEwan P.J., McKernan K.J., Malek J.A., Gunarathe P.H.,

Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

A villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,

Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,

Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,

Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,

Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,

Rodriguez A.C., Grimwood S.J.M., Marra M.A.;

"Medentation and initial analysis of more than 15,000 full-length human
                            Bukaryoča, Metazoa, Chordata, Craniata; Vertebrata, Buteleostomi,
Mammalia; Butheria; Buarchontoglires, Primates, Catarrhini; Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUCLECTIDE SEQUENCE.

McCombie W.R., Wilson R., Chen B., Gibbs R., Zuo L., Johnson D.,
Mhan M., Parrell L., Dedhia N., Ansari A., Mardis E., Schutz K.,
Gnoj L., la Bastide M., Kaplan N., Greco T., Touchman J., Muzny D.,
Chen C.N., Evans C., Fitzgerald M., See L.H., Tang M., Porcel B.M.,
Dragan Y., Glacalone J., Pae A., Powell B., Solinsky K.A., Desilva U.,
Sagripanti J.L.,
                                                                                                                                                                                                                                                                                                                                                                            NUCLECTIDE SEQUENCE.

MEDIATE=97120864, PubMed=8995400, DOI=10.1074/jbc.272.2.1038;

MEDIATE=97120864, PubMed=8995400, DOI=10.1074/jbc.272.2.1038;

MODIATION AND MAYORES J.U., TOOU C.-L., Gosling J., Arai H., Charo I.F.;

"Organization and differential expression of the human monocyte chemoattractor procein I receptor gene. Evidence for the role of the carboxyl-terminal tail in receptor trafficking.";
                                                                                                                                                                                              chemoattractant protein 1 receptors reveals alternative splicing of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUCLEOTIDE SEQUENCE [GENOMIC DNA], AND VARIANTS ILE-64 AND GLU-155. Rieder M.J., Armel T.Z., Carrington D.P., Ozuna M., Kuldanek S.A., Rajkumar N., Toth E.J., Yi Q., Nickerson D.A.; "SeattlesNPs. NHIBI HL6662 program for genomic applications, UW-FRCK, Seattle, WA (UKL. http://pga.gs.washington.edu)."; submitted (SEP-2002) to the EMBL/GenBank/DDBJ databases.
                                                                                                                       MEDLINE=94195821; PubMed=8146186;
Charo I.F., Myers S.J., Herman A., Franci C., Connolly A.J.,
Coughlin S.R.;
                                                                                                                                                                             "Molecular cloning and functional expression of two monocyte
                                                                                                                                                                                                                                                           NUCLEOTIDE SEQUENCE.
MEDLINE=94324942; PubMed=8048929;
Yamagami S., Tokuda Y., Ishii K., Tamaka H., Endo N.;
Yamagami S., Tokuda Y., Ishii K., Tamaka H., Endo N.;
Chemography closed functional expression of a human monocyte chemoattractant protein 1 receptor.";
Biochem. Biophys. Res. Commun. 202:1156-1162(1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Submitted (MAY-1997) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUCLEOTIDE SEQUENCE [LARGE SCALE MRNA] (ISOFORM A).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
                                                                                                                                                                                                             the carboxyl-terminal tails."; Proc. Natl. Acad. Sci. U.S.A. 91:2752-2756(1994)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AND N-GLYCOSYLATION.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE=20501139; PubMed=11046064;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          mouse cDNA sequences.";
Name=CCR2; Synonyms=CMKBR2;
               Homo sapiens (Human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SULFATION OF TYR-26,
                                                                                                              NUCLEOTIDE SEQUENCE
                                                                            NCBI_TaxID=9606;
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This Swiss-Prot entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use as long as its content is in no way modified and this statement is not
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GO; GO:0005886; C:plasma membrane; TAS.
GO; GO:0005525; C:soluble fraction; TAS.
GO; GO:0004550; P:chemotkine receptor activity; TAS.
GO; GO:000595; P:chemotaxis; TAS.
GO; GO:0006959; P:chemotaxis; TAS.
GO; GO:0006959; P:chemotaxis; TAS.
GO; GO:0007935; P:chemotaxis; TAS.
GO; GO:000794; P:inflammatory response; TAS.
GO; GO:0007294; P:inflammatory response; TAS.
GO; GO:0007294; P:postitive regulation of adenylate cyclase ac. .; TAS.
GO; GO:0007204; P:postitive regulation of cytosolic calcium io. .; TAS.
InterPro; IPR000255; Chmkine receptor.
InterPro; IPR000256; GPCR_Rhodpsn.
Preobrazhensky A.A., Dragan S., Kawano T., Gavrilin M.A., Gulina I.V., Chakravarty L., Kolattukudy P.B., "Monocyte chemotactic protein-1 receptor CCR2B is a glycoprotein that has tyrosine sulfation in a conserved extracellular N-terminal
                                                                                                                                            region.";
J. mmunol. 165:5295-5303(2000).
-!- Function: Receptor for the MCP-1, MCP-3 and MCP-4 chemokines.
-!- FUNCTION: Receptor for the MCP-1, MCP-3 and MCP-4 chemokines.
Transduces a signal by increasing the intracellular calcium ions level. Alternative coreceptor with CD4 for HIV-1 infection.
-!- SUBCELLULAR LOCATION: Integral membrane protein.
-!- ALTERNATIVE PRODUCTS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -i- PTM: N-glycosylated. -
-i- SIMILARITY: Belongs to the G-protein coupled receptor 1 family.
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PRINTS; PRO057; CCCHEMOKINER.

PRINTS; PRO1010; CHEMOKINER.

PRINTS; PRO1027; GPCERHODOPSN.

PROSITE; PS00237; GPCERHODOPSN.

PROSITE; PS00262; GPROTEIN RECEP F1 1; 1.

3D-structure; Alternative splicing; G-protein coupled receptor; Glycoprotein; Polymorphism; Receptor; Sulfation; Transducer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 (Potential).
Cytoplasmic (Potential).
2 (Potential).
Extracellular (Potential).
3 (Potential).
Cytoplasmic (Potential).
4 (Potential).
5 (Potential).
5 (Potential).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GO; GO:0005887; C:integral to plasma membrane; TAS.
GO; GO:0005886; C:plasma membrane; TAS.
GO; GO:0005525; C:soluble fraction; TAS.
GO; GO:0004950; P:chemokine receptor activity; TAS.
GO; GO:0019735; P:antimicrobial humoral response
GO; GO:0006968; P:cellular defense response; TAS.
GO; GO:000698; P:chemotaxis; TAS.
GO; GO:0005954; P:inflammatory response; TAS.
GO; GO:0007259; P:JAK-STAT cascade; TAS.
GO; GO:0007259; P:JAK-STAT cascade; TAS.
                                                                                                                                                                                                                                                                                                                                                                                                 Event=Alternative splicing; Named isoforms=2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EMBL; U03982; AAA19119.1; -; mRNA.
EMBL; U03905; AAA19120.1; -; mRNA.
EMBL; U09994; BAA06253.1; -; Genomic DNA.
EMBL; U80924; AAC51637.1; -; Genomic DNA.
EMBL; U95626; AAB57791.1; -; Genomic DNA.
EMBL; U95626; AAB57792.1; -; Genomic DNA.
EMBL; AF549480; AAN16400.1; -; Genomic DNA.
EMBL; AF549480; AAN16400.1; -; Genomic DNA.
EMBL; AF547480; AAN16400.1; -; Genomic DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IsoId=P41597-2; Sequence=VSP_001893;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           lsoId=P41597-1; Sequence=Displayed;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PIR, 138450, 138450.
PIR, JC2443; JC2443.
PDB, 1KAD; Model, A=1-313.
PDB; 1KPJ; Model; A=1-313.
HGNC; HGNC:1603; CCR2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          42
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GenCore version 5.1.7
Copyright (c) 1993 - 2006 Biocceleration Ltd.
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OM protein - protein search, using sw model

March 29, 2006, 14:04:54; Search time 41 Seconds (without alignments) 877.685 Million cell updates/sec Run on:

374
1 MLSTSRSRFIRNTNESGEEV.....GKGKSIGRAFEASLQDKEGA 374 Title: Perfect score:

US-10-791-592-2

Sequence:

Scoring table:

283416 seqs, 96216763 residues OLIGO Gapor 60.0 , Gapext 60.0 Searched:

Word 812e

Total number of hits satisfying chosen parameters:

13

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Listing first 90 summaries

1: pir1:* 2: pir2:* 3: pir3:* 4: pir4:* Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| | | de | | | | |
|--------|-------|-------|-----------|----|--------|--------------------|
| Result | | Query | | | | |
| No. | Score | Match | Length DB | BB | ΩI | Description |
| 1 | 374 | 100.0 | 374 | 7 | 138450 | chemokine (C-C) re |
| 0 | 313 | 83.7 | 360 | ~ | JC2443 | chemokine (C-C) re |
| m | 26 | 7.0 | 352 | ~ | A43113 | chemokine (C-C) re |
| 4 | 22 | 5.9 | 355 | ~ | G02436 | chemokine (C-C) re |
| S | 22 | 5.9 | 355 | ~ | A45177 | chemokine (C-C) re |
| 9 | 22 | 5.9 | 355 | ~ | 149339 | macrophage inflamm |
| 7 | 22 | 5.9 | 359 | N | I49341 | MIP-1 alpha recept |
| 80 | 12 | 3.2 | 360 | ~ | A57160 | chemokine (C-C) re |
| 6 | . 12 | 3.2 | 360 | ~ | JC4587 | chemokine (C-C) re |
| 10 | 12 | 3.2 | 383 | ~ | S55594 | G protein-coupled |
| 11 | 11 | 2.9 | 341 | ~ | 863666 | platelet activatin |
| 12 | 11 | 2.9 | 342 | N | S13638 | platelet-activatin |
| 13 | 11 | 2.9 | 354 | ~ | I58186 | probable G protein |
| 14 | 10 | 2.7 | 308 | ~ | I50241 | G protein-coupled |
| 15 | 10 | 2.7 | 327 | ~ | S56162 | MDCR15 protein - h |
| 16 | 10 | 2.7 | 333 | N | S78136 | NADH2 dehydrogenas |
| 17 | 10 | 2.7 | 372 | ~ | S26667 | G protein-coupled |
| 18 | 10 | 2.7 | 374 | ~ | 842628 | G protein-coupled |
| 19 | 10 | 2.7 | 374 | 7 | S32785 | G protein-coupled |
| | | | | | | |

ALIGNMENTS

Occasione (C-C) receptor 2, splice form B - human
NyAlternate names: C-C CKR-2; monocyte chemoattractant protein 1 receptor; monocyte chemosyternate names: C-C CKR-2; monocyte chemoattractant protein 1 receptor; monocyte chemosyselses: Homo sapiens (man)
C;Daccession: JPP6-1995 #sequence_revision 05-Apr-1995 #text_change 09-Jul-2004
C;Accession: JC2443; I38463
B;Yamagami, S.; Tokuda, Y.; Ishii, K.; Tanaka, H.; Endo, N.
Biochem. Biophys. Res. Commun. 202, 1156-1162, 1994
A;Title: CDNA cloning and functional expression of a human monocyte chemoattractant protein A;Reference number: JC2443; MUID:94324942; PMID:8048929
A;Accession: JC2443
A;Molecule type: mRNA

RESULT 1 138450 Chemokine (C-C) receptor 2, splice form A - human N;Alternate names: C-C CKR-2; monocyte chemoattractant protein 1 receptor; monocyte chem C;Species: Homo sapiens (man)

| ange 09-Jul-2004 y, A.J.; Coughlin, S.R. monocyte chemoattractant prot EMBL:U03882; NID:g472555; PIDP | glycoprotein; transmembrans cted | 4; 0; Gaps 0; | SLVFIFGFVGN 60 SLVFIFGFVGN 60 | NAMCKLFTGLY 120 NAMCKLFTGLY 120 | FASVPGIIFTK 180 FASVPGIIFTK 180 | LRCRNEKKRHR 240 LRCRNEKKRHR 240 | FETLGMTHCCI 300 | LLDGRGKGKSI 360 LLDGRGKGKSI 360 | | |
|--|--|--|--|--|--|--|--|---|--|--|
| ### ################################## | protein-coupled receptor; us predicted <tm1> arus predicted <tm3> atus predicted <tm3> atus predicted <tm5> atus predicted <tm6> atus predicted <tm7> n) (covalent) #status predi</tm7></tm6></tm6></tm6></tm6></tm6></tm6></tm5></tm5></tm5></tm5></tm5></tm3></tm3></tm1> | Query Match 100.0%; Score 374; DB 2; Length 374 Best Local Similarity 100.0%; Pred. No. 0; Matches 374; Conservative 0; Mismatches 0; Indels | 1 MLSTSRSRFIRNTNESGEBVTTPPDYDYGAPCHKFDVKQIGAQLLPPLYSLVFIRGFVGN | 61 MEVVLILINCKKERKCITDIYLENLAISDELFLITLPENAHSAANEWVFGNAMCKEFTGLY | 121 HIGYFGGIFFIILLTIDRYLAIVHAVPALKARTVTFGVVTSVITWIVAVFASVPGIIFTK | 181 COKEDSVYVCGPYFPRGWNNFHTIMENILGIVLPLLIMVICVSGILKTLLRCRNEKGRHR | 241 AVRVIFTIMIVYFLFWTPYNIVILLNTFQBFFGLSNCESTSQLDQATQVTETLGMTHCCI | 301 NPIIYAEVGEKERSLFHIALGCRIAPLOKPVCGGFGVRPGKNVKVTTQGLLDGRGKGKS | 361 GRAPKASLODKEGA 374 361 GRAPKASLQDKEGA 374 | |
| | 244711122221E | δăž | & g | දි දි | දි දි | දි සි | S 8 | දි දි | දි දි | |

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A;Accession: G02653
A;Status: translated from GB/EMBL/DDBJ
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A;Map position: 3p21-3p21
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A, Molecule type: mRNA
A, Residues: 1-352 <COM1>
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                                                                                                                                                                        A;Cross-references: UNIPROT:P41597; UNIPARC:UP1000002A69C; DDBJ:D29984; NID:g531246; PID R;Charo, I.F.; Wyers, S.J.; Herman, A.; Franci, C.; Connolly, A.J.; Coughlin, S.R. Proc. Natl. Acad. Sci. US.A. 91, 2752-2756, 1994
A;Title: Wolecular cloning and functional expression of two monocyte chemoattractant pro A;Reference number: A53477; MUID:94195821; PMID:8146186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  chemokine (C-C) receptor 5 - human
N;Alternate names: C-C CKR-5; CCR5
C;Species: Homo sapiens (mai)
C;Species: Homo sapiens (mai)
C;Date: 12-Jul-1996 #sequence revision 12-Jul-1996 #text_change 20-Jun-2000
C;Accession: A43113; S71808; Ā58834; A58832; G02653; A58833
R;Samson, M.; Labbe, O.; Mollereau, C.; Vassart, G.; Parmentier, M.
Biochemistry 35, 3362-3367, 1996
A;Title: Molecular cloning and functional expression of a new human CC-chemokine recepto
A;Reference number: A43113; MUID:96241590; PMID:8639485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Residues: 1-352 <SAMI>
A;Cross-references: UNIPARC:UPI00000D955; GB:X91492; NID:g1262810; PIDN:CAA62796.1; PID A;Cross-references: UNIPARC:UPI00000D955; GB:X91492; NID:g1262810; PIDN:CAA62796.1; PID R;Sameon, M.; Libert, F.; Doranz, B.J.; Rucker, J.; Liesnard, C.; Farber, C.M.; Saragost M.; Imai, T.; Rana, S.; Yi, Y.; Smyth, R.J.; Collman, R.G.; Doms, R.W.; Vassart, G.; Pa
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100.0%; Pred. No. 5...
0; Mismatches
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Matches 313; Conservative
A;Residues: 1-360 <YAM>
                                                                                                                                     A; Accession: I38463
A; Status: preliminary
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A;Title: Resistance to HIV-1 infection in caucasian individuals bearing mutant alleles of A;Reference number: S71808; MUID:96345670; PMID:8751444 A;Accession: S71808
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B;Combadiers, C:; Ahuja, S.K.; Tiffany, H.L.; Murphy, P.M.
A;Title: Cloning and functional expression of CC CKR5, a human monocyte CC chemokine receptive number: A58832; MUID:96295970; PMID:8699119
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A;Experimental source: clone 8, endotoxin-stimulated peripheral blood monocytes
R;Combadiere, C.
submitted to the EMBL Data Library, May 1996
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A,Residues: 1-352 <RAP>
A,Cross-references: UNIPARC:UPI0000000955; GB:U54994; NID:g1457945; FIDN:AAC50598.1; PID:
C,Comment: This is a receptor for chemokines MIP-1alpha (see PIR:A30574), MIP-1beta (see
C,Comment: Macrophage- and dual-tropic strains of HIV-1 bind to a complex of chemokine ((
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A; Note: probably acts to control granulocyte proliferation and differentiation
C; Superfamily: vertebrate rhodopsin
C; Superfamily: vertebrate rhodopsin
C; Superfamily: vertebrate rhodopsin
F; 32-56/Domain: transmembrane #status predicted <TM1>
F; 67-87/Domain: transmembrane #status predicted <TM2>
F; 103-124/Domain: transmembrane #status predicted <TM3>
F; 103-124/Domain: transmembrane #status predicted <TM4>
F; 193-218/Domain: transmembrane #status predicted <TM5>
F; 193-218/Domain: transmembrane #status predicted <TM5>
F; 236-257/Domain: transmembrane #status predicted <TM7>
F; 236-257/Domain: transmembrane #status predicted <TM5>
F; 236-257/Domain: transmembrane #status predicted <TM7>
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J. 1161-11166, 1996
A;Title: Molecular cloning and functional characterization of a novel human CC chemokine
A;Reference number: A58833; MUID:96291862; PMID:8663314
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F:268/Binding site: carbohydrate (Asn) (covalent) #status predicted
F:336,337,342/Binding site: phosphate (Ser) (covalent) #status predicted
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A;Residues: 182-206;207-230 <SAM2>
A;Cross-references: UNIPARC:UP100001778E9; UNIPARC:UP100001778EA
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A;Cross-references: GDB:1230510; OMIM:601373
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A;Residues: 1-89,'L',91-352 <COM2>
A;Cross-references: UNIPARC:UP100001778EB; EMBL:U57840
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| Adm67225 Human adi Ad182831 Human PRO Ady15868 PRO polyp Adf56627 Partial h Adw15156 Human mon Aau07613 Human CCR Abb56340 Non-endog Abb48859 Human MCP Abb481055 Human MCP | Adriese Human MCP Aay01249 Chemokine Aay01249 Chemokine Aab2130 Human alt Aeb22130 Human che Adm67224 Murine ad Adc29222 Murine ad Adc39222 Murine ac Aag80052 Chemokine Aaw27125 Macaque c Aaw07602 Human G-p Aay80128 Human G-p Aay80128 Human G-p | Aae07046 Human G-p Aae07037 Human G-p Aau97150 Human G-p Aae25808 Human G-p Aac25808 Human G-p AdC03359 Macaque c Adf72122 Human G-p Adt9085 Macaque c Ad7744 Macaque c Aay72685 Human (MC Aax72169 End of th Aaw54037 Mouse CC Ad029228 Mouse GCC Ad04863 Rat Prote Ad44863 Chemokine Aay39252 G-protein Adc10142 Human NOV Ad010144 Human NOV | Ady27122 Amino aci Ady27122 Amino aci Aaw26766 Human Che Aaw27123 Human Che Aaw28335 Human CC Aaw88232 HUwan CC Aaw88212 HUwan CC Aaw88211 Human CCR Aaco7039 Human CcR Aaco7039 Human CcR Aaco7039 Human CCR Aab56342 Non-endog Aab56342 Human CCR Aab52948 Human CCR Aam52829 Human CCR Abg7152 Human G-p Abg92883 Human CCR Abg70597 Human G-p Abg92883 Human CCR Abg70597 Human G-p Abg92883 Human G-p Abg92863 Human G-p Abg92863 Human G-p Abg92863 Human G-p Abg92863 Human G-p Abg958602 Human G-p Abb08343 Human Cce Abg75540 Human G-p Abb08343 Human Cce Abg75540 Human Cce |
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                                            Human monocyte chemoattractant protein-1 receptor MCP-1RA.
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                                                                                                                                                                                                                                                                                                  241 AVRVIFTIMIVYPLEWTPYNIVILLANTFQEFFGLSNCESTSQLDQATQVTETLGMTHCCI 300
                                                                                                                                                                                                                                                                                                                                                          301 NPIIYAFVGEKFRSLFHIALGCRIAPLQKPVCGGPGVRPGKNVKVTTQGLLDGRGKGKSI 360
                                                      9
                                                                                 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Chemokine; tumour diagnosis; colorectal; prostatic; organ rejection; inflammation; autoimmune disease; metastasis; bronchial asthma; lupus; chronic bowel inflammation; rheumatiod arthritis; cytostatic; antilathmatic; immunosuppressive; dermatological; antirheumatic; antiarthritic.
                                                                                                                            61 MLVVLILINCKKLKCLFDIYLINIAISDLLFLITLPLWAHSAANEWVFGNAMCKLFTGLY
                                                      1 MLSTSRSRFIRNTNESGEEVTTFFDYDYGAPCHKFDVKQIGAQLLPPLYSLVFIFGFVGN
                                                                             1 MLSTSRSRFIRNTNESGEBVTTFPDYDYGAPCHKFDVKQIGAQLLPPLYSLVFIFGFVGN
                                                                                                            61 MLVVIJILINCKKIKCLTDIYLINLAISDILFLITLPIWAHSAANEWVFGNAMCKLFTGLY
                                                                                                                                                                                                                            181 COKEDSVYVCGPYPPRGWNNFHTIMRNILGLVLPLLIMVICYSGILKTLLRCRNEKKRHR
                                                                                                                                                                                                                                                                                    241 AVRVIFTIMIVYFLFWTPYNIVILLNTFQEFFGLSNCESTSQLDQATQVTETLGMTHCCI
                            Gaps
                          ö
                          Indels
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                          ö
Score 374; l
Pred. No. 0;
                            0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Heitland A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAG80107 standard; protein; 374 AA.
100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     31-MAR-2000; 2000DE-01016013.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          02-APR-2001; 2001WO-EP003708
                                                                                                                                                                                                                                                                                                                                                                                                    361 GRAPEASLQDKEGA 374
                                                                                                                                                                                                                                                                                                                                                                                                                  361 GRAPEASLQDKEGA 374
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
           Best Local Similarity 100.
Matches 374; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Forssmann W, Adermann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IPFP-) IPF PHARM GMBH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human CCR2a protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2001-626256/72.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FORSSMANN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              04-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAG80107;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (FORS/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo
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degenerate oligo primers were designed corresp. to the conserved degenerate oligo primers were designed corresp. to the conserved domains of the MIP-latha/RANTES receptor, the IL-8 receptors and the HUMSTR orphan receptor (GenBank Accession #M99293. The degenerate oligo incorporating EcoRI and XhoI sites at their 5' ends are Q96299 and (99610 Amplification of CDNA derived from MM6 cells with the primers yieled a number of PCR products. One CDNA appeared to encode a novel protein. To obtain a full-length version of this clone, a MM6 cDNA library was constructed in pFROG and probed with the PCR product. A 2.1 kb cDNA clone was obtd. Analysis of additional clones in the MM6 cDNA library revealed a second sequence that was identical to the 2.1 kb cDNA clone was obtd. Analysis of additional clones in the MM6 cDNA sequence first obtd. from the 5' UTR through the putative seventh sequence from the 5' UTR through the putative seventh carnsmembrane domain but contained a different cytoplasmic tail. The second sequence appears to represent alternative splicing of the carboxyl terminal tail of the MCP-IR protein. The two sequences are denoted MCP-tranhal tail of the MCP-IR protein. The two sequences are denoted MCP-tranhal and MCP-IRB has a predicted mol. wt. of about 42,000 daltons. MCP-IRB has a mol. wt. of about 42,000 daltons correct PN

identify and clone new members of the chemokine receptor gene family,

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GenCore version 5.1.7

Copyright (c) 1993 - 2006 Biocceleration Ltd.

OM protein - protein search, using sw model

Run on: March 29, 2006, 14:21:06; Search time 25 Seconds

(without alignments)

455.411 Million cell updates/sec
```

Title: US-10-791-592-2

Perfect score: 374
Sequence: 1 MLSTSRSRFIRNTNESGEEV......GKGKSIGRAPEASLQDKEGA 374
Scoring table: OliGobid
Gapop 60.0 , Gapext 60.0
Searched: 180808 seqs, 30441898 residues

Mord size : 10 Total number of hits satisfying chosen parameters:

15

Minimum DB seq length: 0 Maximum DB seq length: 2000000000 Post-processing: Listing first 90 summaries Database: Published Applications AA New:*

1: /SIDSS/ptodata/2/pubpaa/USO8_NEW_PUB.pep:*

2: /SIDSS/ptodata/2/pubpaa/USO6_NEW_PUB.pep:*

3: /SIDSS/ptodata/2/pubpaa/USO7_NEW_PUB.pep:*

4: /SIDSS/ptodata/2/pubpaa/NEO7_NEW_PUB.pep:*

5: /SIDSS/ptodata/2/pubpaa/USO7_NEW_PUB.pep:*

6: /SIDSS/ptodata/2/pubpaa/USO9_NEW_PUB.pep:*

7: /SIDSS/ptodata/2/pubpaa/USI0_NEW_PUB.pep:*

8: /SIDSS/ptodata/2/pubpaa/USI1_NEW_PUB.pep:*

Pred, No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| Description | Sequence 60, Appl | Sequence 20, Appl | Sequence 523, App | Sequence 2, Appli | Sequence 61, Appl | Sequence 522, App | Sequence 4, Appli | _ | Sequence 2, Appli | Sequence 4, Appli | Sequence 6, Appli | Sequence 36, Appl | Sequence 1, Appli | Sequence 34, Appl | Sequence 2, Appli |
|-------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| ID | US-11-127-877-60 | US-11-068-686-20 | US-10-995-561-523 | US-11-068-686-2 | US-11-127-877-61 | US-10-995-561-522 | US-11-068-686-4 | US-11-127-877-64 | US-11-216-610-2 | US-11-216-610-4 | US-11-216-610-6 | US-10-959-310-36 | US-11-144-731-1 | US-11-262-284-34 | US-11-157-930-2 |
| DB | - | 7 | 9 | 7 | 7 | 9 | 7 | 1 | 7 | 7 | 7 | 9 | 7 | 7 | 7 |
| * Query Match Length DB | 374 | 352 | 352 | 352 | 352 | 216 | 355 | 355 | 355 | 355 | 355 | 360 | 360 | 360 | 346 |
| % Query Match | 100.0 | 10.4 | 7.0 | 7.0 | 7.0 | 6.1 | 5.9 | 5.9 | 5.9 | 5.9 | 5.9 | 3.2 | 3.2 | 3.2 | 2.7 |
| Score | 374 | 39 | 56 | 26 | 56 | 23 | 22 | 22 | 22 | 22 | 22 | 12 | 12 | 12 | 10 |
| Result No. | | 73 | m | 4 | • | 9 | 7 | æ | o | 01 | 11 | 12 | 13 | 14 | 15 |

ALIGNMENTS

```
US-11-127-877-60

i Sequence 60, Application US/11127877

i Publication No. US20050287565A1

j GENERAL INFORMATION:
```

```
APPLICANT: Merchiers, Pascal G.
APPLICANT: Hoffman, Marcel
APPLICANT: Hoffman, Marcel
APPLICANT: Laenen, Wendy
TITLE OF INVENTION: Methods, Compositions and Compound Assays For Inhibiting
TITLE OF INVENTION: Amyloid-Beta Protein Production
FILE REFERENCE: P27, 800-B USA
CURRENT APPLICATION NUMBER: US/11/127,877
CURRENT FILING DATE: 2004-05-12
PRIOR APPLICATION NUMBER: 60/570,352
PRIOR APPLICATION NUMBER: 60/570,352
PRIOR FILING DATE: 2004-06-24
NUMBER OF SEQ. DATE: 2004-06-24
NUMBER OF SEQ. DATE: 2004-08-24
                                                                                                                                                  COMPUTER: IEM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: BAGEAILIN Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/11/068,686
FILING DATE: 28-Feb-2005
CLASSIFICATION: Culbknown>
ATORNEY/AGENT INFORMATION:
NAME: Noland, Greta E.
REGISTRATION NUMBER: 35,302
REPERROCE/DOCKET WUMBER: 37,302
REPERROCE/DOCKET WUMBER: 27866/33670
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312-474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 352;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                "88C amino acid sequence"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
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STREET: 6300 Sears Tower, 233 S. Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 7; Lens.
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3. 2.9e-18;
0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 7.0%; Score 26; DB Best Local Similarity 100.0%; Pred. No. 2.5 Matches 26; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
CTHER INFORMATION: /= "88C am
;
SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-11-068-686-2
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                                                                                    ZIP: 60606
UTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 61, Application US/11127877
Publication No. US20050287565A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                      INFORMATION FOR SEQ 1D NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 352 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: Patentin version 3.3
SEQ ID NO 61
LENGTH: 352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY: linear MOLECULE TYPE: protein
                     CITY: Chicago
STATE: Illinois
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JS-11-127-877-61
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Publication No. US20050272054A1

GENERAL INFORMATION:

GENERAL INFORMATION:

TITLE OF INVENTION: GENETIC POLYMORPHISMS ASSOCIATED WITH

TITLE OF INVENTION: DETECTION AND USES THEREOF

FILE REFERENCE: CLOO1559

CURRENT APPLICATION NUMBER: US/10/995,561

CURRENT FILING DATE: 2004-11-24

NUMBER OF SEQ ID NOS: 85702

SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
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Publication No. US20050260565A1
GENERAL INFORMATION:
APPLICANT: Gray, Patrick W.
Schweickart, Vicky L.
Raport, Carol J.
TITLE OF INVENTION: Chemokine Receptor Materials and Methods
NUMBER OF SEQUENCES: 20
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ô
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Indels
                  OPERATING SYSTEM: PC_DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/11/068,686
FILING DATE: 28-Feb-2005
CLASSIFICATION: <UNKNOWN>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              115 GIFFIILLTIDRYLAIVHAVFALKARTVTFGVVTSVITW 153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    127 GIFFIILLTIDRYLAIVHAVFALKARTVTFGVVTSVITW 165
                                                                                                                                               ATTORNEY AGENT INFORMATION:
NAME: Noland, Greta E.
REGISTRATION NUMBER: 35,302
REFERENCE/DOCKET NUMBER: 27866/33670
TELEPOMMUNICATION INFORMATION:
TELEPAK: 312-474-0448
INFORMATION FOR SEQ ID NO: 20:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
10.4%; Score 39; DB 7; Le
Best Local Similarity 100.0%; Pred. No. 2.1e-31;
Matches 39; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 26; DB 6; L
Pred. No. 2.9e-18;
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100.0%; Pred. No. ...
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                TOPOLOGY: linear
)
MOLECULE TYPE: protein
)
SEQUENCE DESCRIPTION: SEQ ID NO: 20:
US-11-068-686-20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  218 MVICYSGILKTLLRCRNEKKRHRAVR 243
COMPUTER: IBM PC compatible
                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 352 amino acida TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 7.0
Best Local Similarity 100.
Matches 26; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-995-561-523
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LENGTH: 352
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Gaps

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Page

| GenCore version 5.1.7 Copyright (c) 1993 - 2006 Biocceleration Ltd. | OM protein - protein search, using sw model | March 29, 2006, 14:20:06 ; Search time 166 Seconds (without alignments) 941.375 Million cell updates/sec | |
|--|---|--|--|
| | OM protei | Run on: | |

US-10-791-592-2 374 1 MLSTSRSRFIRNTNESGEEV......GKGKSIGRAPEASLQDKEGA 374 Title: Perfect score: Sequence:

OLIGO Gapop 60.0 , Gapext 60.0 Scoring-table:

1867569 segs, 417829326 residues Searched:

10 Word size

335 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Listing first 90 summaries

Published Applications AA Main:*
1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep:*
2: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*
3: /cgn2_6/ptodata/1/pubpaa/US108_PUBCOMB.pep:*
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5: /cgn2_6/ptodata/1/pubpaa/US108_PUBCOMB.pep:*
6: /cgn2_6/ptodata/1/pubpaa/US108_PUBCOMB.pep:* Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

| | Description | Sequence 13, Appl | 14, | | 14, | | | 7 | 14, | 13, | 2, 7 | 126 | 387, | 1087, | 161, | 6 | ď | σÌ | ď | o, | o, | 24 | 2,7 | 460, | 20, | Seguence 64, Appl | ä | 28 |
|-----------|--------------------------|-------------------|------------------|------------------|------------------|-------------------|-----------------|-----------------|------------------|------------------|-----------------|-------------------|--------------------|---------------------|-------------------|------------------|------------------|-----------------|-----------------|-----------------|-----------------|------------------|------------------|--------------------|------------------|-------------------|-----------------|-------------------|
| SUMMARIES | ID | US-09-893-512-13 | US-10-039-659-14 | US-10-239-423-63 | US-10-754-071-14 | US-10-741-601-287 | US-10-791-592-2 | US-10-791-166-2 | US-10-759-860-14 | US-10-799-736-13 | US-10-988-267-2 | US-10-773-446-126 | US-10-287-436A-387 | US-10-287-436A-1087 | US-11-021-951-161 | US-09-779-879A-9 | US-09-779-880A-9 | US-10-232-686-9 | US-10-067-800-9 | US-10-135-839-9 | US-10-994-679-9 | US-10-988-267-24 | US-09-131-827A-2 | US-10-225-567A-460 | US-10-164-649-50 | US-10-239-423-64 | US-10-439-845-8 | US-10-741-601-285 |
| | DB | <u>س</u> | 4 | 4 | 4 | 4 | Ŋ | Ŋ | ഗ | ß | ហ | S | ഗ | s | 9 | m | ო | 4 | 4 | 4 | 'n | 'n | m | 4 | 4 | 4 | 4 | 4 |
| | Query Match Length DB | 374 | 374 | 374 | 374 | 374 | 374 | 374 | 374 | 374 | 374 | 374 | 374 | 374 | 374 | 344 | 344 | 344 | 344 | 344 | 344 | 359 | 360 | 360 | 360 | 360 | 360 | 360 |
| de | Query Match | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 92.0 | 92.0 | 92.0 | 92.0 | 92.0 | 92.0 | 83.7 | 83.7 | 83.7 | 83.7 | 83.7 | 83.7 | 83.7 |
| | Score | 374 | 374 | 374 | 374 | 374 | 374 | 374 | 374 | 374 | 374 | 374 | 374 | 374 | 374 | 344 | 344 | 344 | 344 | 344 | 344 | 313 | 313 | 313 | 313 | 313 | 313 | 313 |
| | Result No. | | 7 | m | 4 | S | 9 | . 7 | 80 | 6 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 |

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| 00000000000000 | |
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ALIGNMENTS

RESULT 1
US-09-893-512-13
Sequence 13, Application US/09893512
Publication No. US20030017530A1
GENERAL INFORMATION:

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301 NPIIYAFVGEKFRSLPHIALGCRIAPLQKPVCGGPGVRPGKNVKVTTGGLLDGRGKGKSI 360
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; Publication No. US20030186889A1
; GENERAL INFORMATION:
; APPLICANT: FORSSMANN, Wolf-Georg; FORSSMANN, Ulf; ADERMANN, Knut;
; APPLICANT: HEITLAND, Aleksandra; SPODSBERG, Nikola;
; TITLE OF INVENTION: Diagnostic Agent and Medicament for Examining the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
100.0%; Score 374; DB 4; Length 374;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 374; Conservative 0; Mismatches 0; Indels
                    COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
                                                                                                                                                                                                                                                                                                                                            REGISTRATION NUMBER: 34,090
REGISTRATION NUMBER: 34,090
REFERENCE/DOCKET NUMBER: DX0589K1
TELECOMFUNICATION INFORMATION:
TELEPHONE: 650-496-1200
INFORMATION FOR SEQ ID NO: 14:
SEQUENCE CHARACTERISTICS:
LENGTH: 374 amino acids
TYPE: amino acids
TYPE: amino acids
                                                                                                                                                                       PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/887,977
FILING DATE: 03-UL-1997
APPLICATION NUMBER: US 60/021,644
FILING DATE: 05-UL-1996
APPLICATION NUMBER: US 60/028,329
FILING DATE: 11-OCT-1996
ATTORNEY/AGENT INFORMATION:
                                                                                    CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/10/039,659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STRANDEDNESS: single

TOPOLOGY: linear

MOLECULB TYPE: protein

SEQUENCE DESCRIPTION: SEQ ID NO: 14:
US-10-039-659-14
                                                                                                                                FILING DATE: 03-Jan-2002
CLASSIFICATION: <Unknown>
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    361 GRAPEASLQDKEGA 374
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                TITLE OF INVENTION: HEPTAHELIX RECEPTOR AND ITS USE AS LEUKOTRIENE B4
TITLE OF INVENTION: RECEPTOR
FILE REPERENCE: 07675.0001-03 SEQUENCE LISTING
CURRENT APPLICATION NUMBER: US/09/893,512
CURRENT FILING DATE: 2001-06-29
PRIOR PELING DATE: 1999-10-14
PRIOR PELING DATE: 1999-10-14
PRIOR PELING DATE: 1999-10-14
PRIOR PELING DATE: 1999-04-15
PRIOR APPLICATION NUMBER: 60/081,958
PRIOR PELING DATE: 1998-04-15
PRIOR PELING DATE: 1998-04-15
PRIOR PELING DATE: 1998-10-13
NUMBER OF SEQ ID NOS: 17
SOFTWARE: PATENTING NOS: 17
SOFTWARE: PATENTING NOS: 17
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Schall, Thomas J.
Vicari, Alain P.
Zlornik, Albert
TITLE OF INVENTION: MAMMALIAN CHEMOKINE REAGENTS
NUMBER OF SEQUENCES: 19
CORRESPONDENCE ADDRESS:
ADDRESSE: DNAX Research Institute
STRET: 901 California Avenue
CITY: Palo Alto
STATE: California
COUNTRY: Palo Alto
ZIP: 94304-1104
COMPUTER READABLE FORM:
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100.0%; Pred. No. 0;
tive 0; Mismatches
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Publication No. US20030018167A1
GENERAL INFORMATION:
APPLICANT: Wang, Wei
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Best Local Similarity 100.
Matches 374; Conservative
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US-09-893-512-13
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GenCore version 5.1.7 Copyright (c) 1993 - 2006 Biocceleration Ltd.

protein search, using sw model • OM protein Run on:

March 29, 2006, 14:08:45 ; Search time 46 Seconds (without alignments) 672.189 Million cell updates/sec

US-10-791-592-2

374
1 MLSTSRSRFIRNTNESGEEV.....GKGKSIGRAPEASLQDKEGA 374 Perfect score: Sequence:

Gapop 60.0 , Gapext 60.0

572060 segs, 82675679 residues Searched:

015 गठनंदा ड्यंद्रिल ८ Total number of hits satisfying chosen parameters:

154

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Listing first 90 summaries

Database :

Issued_Patents_AA:*
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.: /cgn2_6/ptodata/1/iaa/6_COMB.pep:*
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.: /cgn2_6/ptodata/1/iaa/RB_COMB.pep:*
.: /cgn2_6/ptodata/1/iaa/RB_COMB.pep:*
.: /cgn2_6/ptodata/1/iaa/RB_COMB.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

2, Appli 12, Appli 2, Appli 2, Appli 1, Appli 1, Appli 9, Appli 6, Appli 50, Appli 6, Appli 7, Appli 7, Appli 7, Appli 8, Appli 8 Sequence 2, Ap Sequence 2, Ap Sequence 14, A Sequence 2, Ap Sequence 1, Ap Sequence 1, Ap Description Sequence Seq US-08-450-393A-2 US-08-445-669-2 US-10-623-553A-14 US-09-625-573-2 US-09-69-016-11222 US-08-466-343D-9 US-08-466-343D-9 US-09-502-784A-9 US-09-502-784A-9 US-09-502-33A-4 US-09-625-573-4 US-09-625-573-4 US-09-625-573-4 US-09-113-827A-2 US-09-113-827A-2 US-09-113-827A-2 US-09-113-827A-2 US-09-113-827A-2 US-09-113-827A-2 US-09-113-827A-2 US-09-113-662A-9 US-09-113-662A-9 US-09-133-752-7 US-09-333-752-7 Length DB Query Score Result No.

| equence 51 equence 52 equence 52 equence 13 equence 13 equence 13 equence 13 equence 13 equence 2, equence 3, equence 6, | ance 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, |
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| US-09-045-583-51 US-09-534-185-51 US-08-6-3430-2 US-08-6-3430-2 US-08-6-3430-2 US-09-517-605-5 US-09-517-605-5 US-09-517-605-5 US-09-517-605-5 US-08-6-13-18-52 US-08-6-18-6-18-6 US-08-9-18-6-18-6 US-08-9-18-6-18-6 US-08-9-9-18-6-18-6 US-08-9-9-18-6-6 US-08-9-9-18-6-6 US-08-9-9-18-6 US-08-9-9-18-18-6 US-08-9-9-18-18-6 US-08-9-9-18-18-6 US-08-9-9-18-18-6 US-08-9-9-18-18-18-6 | US-09-087-232A-23 US-08-456-69-14-14-14-14-14-14-14-14-14-14-14-14-14- |
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ALIGNMENTS

RESULT 1
US-08-450-393A-2
; Sequence 2, Application US/08450393A
; Patent No. 5707815
; GENERAL INFORMATION:

Sequence Sequence 7 Sequence 7 Sequence 7 Sequence 7 Sequence 7 Sequence 7 Sequence 1

224 2224 2224 1194 1194 1194

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Patent No. 6132987
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APPLICANT: Charo, Israel
APPLICANT: Coughlin, Shaun
TITLE OF INVENTION: MANWALLAN MONOCYTE CHEMOATTRACTANT
TITLE OF INVENTION: PROTEIN RECEPTORS
NUMBER OF SEQUENCES: 14
CORRESPONDENCE ADDRESS:
ADDRESSE: Cooley Godward Castro Huddleson & Tatum
STREET: Palo Alto Square
CITY: Palo Alto
                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION DATA:

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/450,393A

FILING DATE: Way 25, 1995

CLASSIFICATION: 424

ATTONENY/AGENT INPORMATION:

NAME: CEET. LUANN

REGISTRATION NUMBER: 31,822

REFRENCE/DOCKET NUMBER: 31,822

REFRENCE/DOCKET NUMBER: 31,822

TELECOMMUNICATION INFORMATION:

TELECOMMUNICATION INFORMATION:

TELECOMMUNICATION INFORMATION:

TELECOMMUNICATION INFORMATION:

TELECOMMUNICATION TOWNER: 315.815

TELECOMMUNICATION TOWNER: 315.815
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100.0%; Pred. No. 0;
tive 0; Mismatches
                                                                                                                                                                                                                                                                        ZIP: 94306-2155
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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TYPE: amino acid
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Best Local Similarity 100.
Matches 374; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MOLECULE TYPE: protein US-08-450-393A-2
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                                                                                                                                                                                                                                                       COUNTRY:
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100.0%; Score 374; DB 2; Length 374;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 374; Conservative 0; Mismatches 0; Indels (
GENERAL INFORMATION:
APPLICANT: Charc, Israel
APPLICANT: Coughlin, Shaun
TITLE OF INVENTION: MAMMALIAN MONOCYTE CHEMOATTRACTANT
TITLE OF INVENTION: PROTEIN RECEPTORS
NUMBER OF SEQUENCES: 14
CORRESPONDENCE ADDRESS: ADDRESSE: Cooley Godward Castro Huddleson & Tatum
STREET: 5 Palo Alto Square
                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION DATA:

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/446,669

FILING DATE: May 25, 1995

CLASSIFICATION: 435

ATTONENY/AGENT INFORMATION:

NAME: Neeley, Richard

REGISTRATION NUMBER: 30,092

REGISTRATION NUMBER: 30,092

REGISTRATION INFORMATION:

TELEPROMUNICATION INFORMATION:

TELEPROMUNICATION INFORMATION:

TELEPROMUNICATION INFORMATION:

TELEPROMUNICATION 1893-5000
                                                                                                                                                                                                                                                                                                               ZIP: 94306-2155
COMPUTER READABLE FORM:
REDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEX: 380816CooleyPA
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
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TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MOLECULE TYPE: protein
                                                                                                                                                                                                                                         CITY: Palo Alto
STATE: California
COUNTRY: USA
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RESULT

RESULT 2 US-08-446-669-2 ; Sequence 2, Application US/08446669